

1 1. A method comprising:
2 positioning a conductive surface of a
3 semiconductor wafer on a conductive polishing pad; and
4 providing electrical contact to said surface
5 across the pad.

1 2. The method of claim 1 including providing a
2 plurality of electrodes exposed through said pad.

1 3. The method of claim 2 including applying a
2 potential of a first polarity to said conductive surface
3 through said pad.

1 4. The method of claim 3 including coupling said
2 electrodes to a potential of a second polarity opposite to
3 the first polarity.

1 5. The method of claim 2 including providing
2 circularly shaped openings in said pad over said
3 electrodes.

1 6. The method of claim 1 including positioning said
2 pad over a conductive platen.

1 7. The method of claim 5 including insulating said
2 electrode from said pad.

1 8. The method of claim 1 including providing said
2 pad over a conductive platen and applying potential to said
3 film through said pad and platen.

1 9. The method of claim 1 including providing
2 electrical contact to said surface over the entire extent
3 of said surface.

1 10. The method of claim 1 including applying pressure
2 between said surface and said pad.

1 11. The method of claim 1 including providing an
2 abrasive fluid between said surface and said pad.

1 12. The method of claim 1 including counter rotating
2 said pad and said surface.

1 13. A polishing pad for an electrochemical polishing
2 process comprising:

3 a conductive body and a plurality of regularly
4 spaced openings through said body; and

5 an electrode in said openings connectable to a
6 potential, said electrode insulated from said body.

1 14. The pad of claim 13 wherein said openings have a
2 circular shape.

1 15. The pad of claim 13 including an insulator
2 between said electrode and said body.

1 16. An electrochemical polishing apparatus
2 comprising:
3 a platen;
4 a pad positioned over said platen, said pad being
5 conductive; and
6 a plurality of electrodes formed within openings
7 in said pad, said electrodes being electrically isolated
8 from said pad.

1 17. The apparatus of claim 16 wherein said platen is
2 electrically conductive.

1 18. The apparatus of claim 16 including insulators to
2 insulate said electrode electrically from said pad.

1 19. The apparatus of claim 16 wherein said electrodes
2 extend through said pad and said platen.